OHIO CULTIVATOR.

A Semi-Monthly Journal of Agriculture and Horticulture.

VOL. 3. COLUMBUS, OHIO, JANUARY 1, 1847. NO. 1.

OHIO CULTIVATOR.

(Published on the 1st, and 15th, of each Month.)

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EDITOR AND PROPRIETOR.

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Address M. B. BATEHAM, Columbus, O.

Special Notices,

IN ANSWER TO NUMEROUS INQUIRIES.

Caution!—We advise all persons not to pay subscriptions for this paper to strangers calling themselves agents, unless they can shown a certificate of agency signed by the editor, and of recent date. We have reason to believe there are impostors at work in various parts of the state.

Those Premiums.—As several persons have asked us to send them *late* volumes of the Genesee Farmer as premiums, we would state that we have none later than 1842,—with a few of 1841; and the double volume (bound) mention in our prospectus, is 1840 and 1842; other volumes have been exhausted and cannot now be had.

The Second Volume of this paper, will in a few days be neatly done up in printed covers and sent as premiums to those entitled to it: also for sale at 75 cts.

Volumes 1 *and* 2, *bound together*, will also be ready very soon; price 1,75.

Postage, Several persons who were entitled to our paper at the club price, have sent $1, and desired us to pay the postage for the year, to balance. This we cannot do, owing to the manner in which packages are done up for the mail.

Now is the Time.

We hope our friends, and the friends of agriculture in Ohio, will not forget that this is *just the time* for them to make efforts to increase the circulation of the Cultivator. Don't be discouraged if many seem stupid and indifferent—try others, and especially younger men. We owe you many thanks for what has been done; but much yet remains to be accomplished.

☞ *Post Masters*, will of course oblige us by remitting subscriptions (at our expense) that may be handed them.

Agents Wanted.

We do not expect to accomplish as much by travelling agents as by local friends; but where persons of suitable qualifications are desirous of engaging in the business of procuring subscriptions, we will give them opportunity of doing so, on terms that will prove advantageous if they possess the requisite talents and energy. Those wishing agencies must furnish testimonials of integrity, &c—and if the distance is not great we prefer they should apply to us in person.

Extra numbers of this paper, for gratuitous distribution will be sent to all who desire them—applications must be free of postage.

☞ We send a copy of our paper to each member of the Legislature, as usual, (gratis) during the session. Those who do not wish to preserve them and become subscribers, are requested to send the numbers to some of their farming constituents.

The Legislature.

The annual report of the State Board of Agriculture, has not yet been presented to the legislature; hence of course no action has been had by that body in relation to Agriculture. The report is nearly ready, and will be presented in few days.

A bill has been intruduced in the Senate, to provide for obtaining correct statistics of the agriculture, manfactures, &c., of the State. It is similar, we believe, to one that was introduced last year, or the year previous. We hope it may pass.

Hear Him! In a private letter from Lewis F. Allen, Esqr., the well known Agriculturist and writer, of Erie Co. N. Y., we have the following paragraph:

"I see by your Cultivator, that you are zealously urging the Ohio State Board of Agriculture to do something for agricultural advancement; but without the "sinews of war" I fear you will make but little progress. In this state, as you know, we had a State Society and all that sort of thing, but until an appropriation was made by the state, it was all a dead letter; and when the *money did come* the work went on with railroad speed, and so continues to progress. So it will be in Ohio. I know it is an up hill business in a state like yours, where at every step you are met with the objections, "State in debt"—"no money in treasury", &c; but no matter—every dollar given by the state will count ten in individual gain, and the state in the aggregate will gain it all."

Construction of Ice Houses.

In our last paper, we gave brief directions for constructing an ice house, and promised to give further information on the subject. We now copy the principal part of an article, with engravings, from the December number of that excellent magazine, the Horticulturist, and append the illustration of *draining* alluded to in our last:

Our business at the present moment is with the *Ice-house*,—as a necessary and most useful appendage to a country residence. Abroad, both the ice-house and the hot-house are portions of the wealthy man's establishment solely. But in this country, the ice-house forms part of the comforts of every substantial farmer. It is not for the sake of ice-creams and cooling liquors, that it has its great value in his eyes, but as a means of preserving and keeping in the finest condition, during the summer, his meat, his butter, his delicate fruit, and in short his whole perishable stock of provisions. Half a dozen correspondents lately, have asked us for some advice on the construction of an ice-house, and we now cheerfully offer all the information in our possession.

To build an ice-house in *sandy or gravelly soils*, is one of the easiest things in the world. The drainage there is perfect, the dry and porous soil is of itself a sufficiently good *non-conductor*. All that it is necessary to do, is to dig a pit, twelve feet square, and as many deep, line it with logs or joists faced with boards, cover it with a simple roof on a level with the ground, and fill it with ice. Such ice-houses, built with trifling cost, and entirely answering the purpose of affording ample supply for a large family, are common in various parts of the country.

But it often happens that one's residence is upon a strong loamy or clayey soil, based upon clay or slate, or, at least, rocky in its substratum. Such a soil is retentive of moisture, and even though it be well drained, the common ice-house just described will not preserve ice half through the summer in a locality of that kind. The clayey or rocky soil is always damp—it is always an excellent conductor, and the ice melts in it in spite of all the usual precautions.

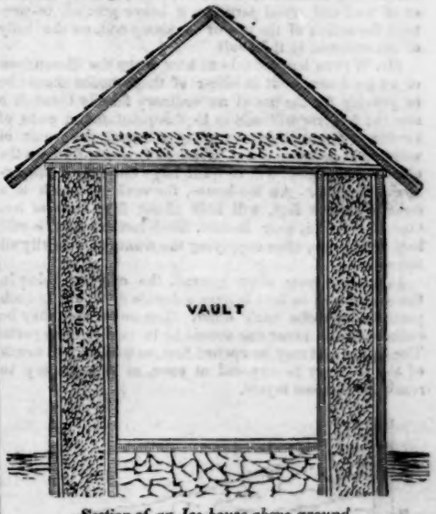
Something more than the common ice-house is therefore needed in all such soils. "How shall it be built?" is the question which has been frequently put to us lately.

To enable us to answer this question in the most satisfactory manner, we addressed ourselves to Mr. N. J. Wyeth of Cambridge, Mass., whose practical information on this subject is probably fuller and more complete than that of any other person in the country—he, for many years, having had the construction and management of the enormous commercial ice-houses near Boston—the largest and most perfect known.

We desired Mr. Wyeth's hints for building an ice-house for family use, both above ground, and below ground.

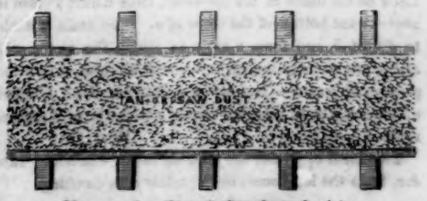
In the begining, we should remark that the great ice houses of our ice companies are usually built above ground; and Mr. Wyeth in his letter to us remarks, "*we now never build or use an ice-house under ground;* it never preserves ice as well as those built above ground, and costs much more. I, however, send you directions for the construction of both kinds, with slight sketches in explanation." The following are Mr. Wyeth's directions for building:

1*st. An ice-house above ground.* An ice-house above ground should be built upon the plan of having a double partition, with the hollow space between filled with some non-conducting substance.



Section of an Ice-house above ground.

In the first place, the frame of the sides should be formed of two ranges of upright *joists*, 6 by 4 inches; the lower ends of the joists should be put into the ground *without any sill*, which is apt to let air pass through. These two ranges of joists should be about two feet and one-half apart at the bottom, and two feet at the top. At the top these joists should be morticed into the cross-beams, which are to support the upper floor. The joists in the two ranges should be placed each opposite another. They should then be lined or faced on one side, with rough boarding, which need not be very tight. This boarding should be nailed to those edges of the joists nearest each other, so that one range of joists shall be outside the building, and the other inside the ice-room or vault, thus;



Manner of nailing the boards to the joists.

The space between these boardings or partitions should be filled with wet tan, or sawdust, whichever is cheapest or most easily obtained. The reason for using *wet* material for filling this space is, that during winter it freezes, and until it is again thawed, little or no ice will melt at the sides of the vault.

The bottom of the ice vault should be filled about a foot deep with small blocks of wood; these are levelled and covered with wood shavings, over which a strong plank floor should be laid to receive the ice.

Upon the beams above the vault, a pretty tight floor should also be laid, and this floor should be covered several inches deep with dry tan or sawdust. The roof of the ice-house should have considerable pitch, and the space between the upper floor and the roof should be ventilated by a lettice window at each gable end, or something equivalent, to pass out the warm air which will accumulate beneath the roof. A door must be provided in the side of the vault to fill and discharge it; but it should always be closed up higher than the ice, and when not in use should be kept closed altogether.

2*d. An Ice-house below ground.* This is only thoroughly made by building up the sides of the pit with a good brick or stone wall, laid in mortar. Inside of this wall set

joists, and build a light wooden partition against which to place the ice. A good floor should be laid over the vault as just described; and this should also be covered with dry tan or sawdust. In this floor the door must be cut to give access to the ice.

As regards the bottom of the vault, the floor, the lattice window in the gables for ventilation, etc., the same remarks will apply that have just been given for the ice-house above ground, with the addition that in one of the *gables*, in this case, must be the door for filling the house with ice.

If the ground where ice-houses of either kind are built, is not porous enough to let the melted ice drain away, then there should be a waste pipe to carry it off, which should be slightly bent, so as always to retain enough water in it to prevent the passage of air upwards into the ice-house."

These plain and concise hints by Mr. WYETH, will enable our readers, who have failed in building ice-houses in the common way, to remedy their defects, or to construct new ones on the improved plan just given. The main points, it will be seen, are, to place a sufficient non-conducting medium of tan or saw-dust, if above ground, or of wall and wood partition, if below ground, to prevent the action of the air, or the damp soil, on the body of ice enclosed in the vault.

Mr. WYETH has not told us how large the dimensions of an ice-house built in either of these modes should be to provide for the use of an ordinary faimily through a season; but we will add as to this point, that a cube of twelve to fourteen feet—that is, a house, the vault of which will measure about twelve to fourteen feet "in the clear," every way, will be quite large enough, if properly constructed. An ice-house, the vault of which is a cube of twelve feet, will hold about fifty tons of ice. One of this size, near Boston, filled last January, is still half full of ice, after supplying the wants of a family all the season.

In the ice-house above ground, the opening being in the side, it will be best to have a double door, one in each partition, opposite each other. The outer one may be entire, but the inner one should be in two or three parts. The upper part may be opened first, so that only so much of the ice may be exposed at once, as is necessary to reach the topmost layers.

Drain to an Ice-house

In our paper of Dec. 15th, we spoke of the importance of effecting complete drainage to the vault of an ice-house, and stated that the drain should be so constucted as to prevent the passage of air through it to the ice. This we said could easily be done by making a *dip* or basin in the drain, where water would stand, whenever any melting of the ice took place.

The above engraving will make this matter very plain. Let *a* be the inside of the ice-vault, from which a drain is made to the bottom of the slope at *c*. This drain is made to *dip* at *b*, and form a basin in which the water will stand, and exclude the air without at all obstructing the passage of water. (It may be well to surround this part of the drain with compact *clay*, if the soil is of a porous nature.)

This form of drains are also useful in excluding rats &c, from the ice-house, or the cellar of a dwelling.

On Draining Lands,

AS AN IMPORTANT MEANS OF IMPROVEMENT.

We propose to give, in several successive numbers of our paper, a few chapters on the improvement of lands by draining, and subsoil-plowing, illustrated with engravings. We are convinced that notwithstanding the high price of labor compared with that of land, in this western country, there are very many farms and tracts of uncultivated lands, that could be *profitably* improved by these processes. And in fact, a majority of the farmers of Ohio have need of more full and practical information on these important subjects, than they now possess. We hope therefore that they will peruse with attention these articles, especially as it is now the season of the year, most favorable for reading.

We commence in this number, with some extracts from Colman's European Agriculture; and it is our design to draw largely from that work hereafter.

THE IMPORTANCE OF DRAINAGE.—It happens with water, as with that other most important and useful element in nature, fire, that, while under certain conditions it is indispensable and most beneficial, under others it becomes prejudicial and destructive. Water is an essential element in vegetation, and, supplied under proper and favorable circumstances, is most conducive to its luxuriance and productiveness but in excess, it is either wholly destructive, or produces only that which is worthless or pernicious. Every one knows this; but it does not come within my province to go into a philosophical discussion of the properties of water as a constituent of vegetation, or of the modes in which it is supposed to operate. An excess of water in the soil prevents the access of the air, which is essential to the health of the plants. It reduces the temperature when it becomes stagnant in the soil. It favors the approach of frost, so that crops are often cut off, in low places, which, but for the wetness of the soil, would otherwise have been fully and seasonably matured. It renders the working of the soil difficult and laborious, and very often impossible.

The removal of an excess of water from the land is the object of drainage, as the throwing of water over the land is the object of that other great and most beneficial operation of husbandry, IRRIGATION, of which I shall speak in its proper place.

Lands may be injured from excess of water in three different ways; first, from being flooded by the tides of the sea; second, by permanent springs in the land; and, third, from the retentive character of the soil, holding fast, like a sponge, the rains which fall; and perhaps from the formation of the land—the water having no chance to escape. These causes may operate singly, or, to a degree, in combination. There are cases in which, where the sea itself does not reach the lands directly, yet it forces back sometimes a fresh-water stream, by which the land is flooded, and the same injurious effects are produced.

Much land in every country is perfectly useless and worthless from these several causes. The question however, whether the drainage of it will prove remunerative, involves a variety of considerations, and many of a strictly local character, which must be taken into view by persons who propose to undertake the drainage of their lands, but upon which it would be impossible for me to enter. There are considerations, connected with the subject, which are not to be measured by a p cuniary st ndard, but whose importance cannot be over-estimated. I mean, for example, such as refer to the health of the count y. The fogs and dampness, arising from wet and undr ined lands, are a prolific source of ill health and sickness. Tracts of land in England, which were liable to fevers and agues, and consumptions, by a complete drainage have become salubrious, and are now upon an average standard of longevity with other parts of the country. The question of the expediency of drain g, in some cases, resolves itself, as in the case of the redemption of peat or other waste lands, into a question of the value of the land after being reclaimed. The cost of drainage may, in some instances, be more than the land is worth after the drainage is effected, or it may be quite equal to its value; but, if it be worth nothing in its undrained condition, the operation may be considered as an actual purchase of the land; and the real satisfaction which a good mind finds in effecting such improvements, and the useful employment of labor, and the productive investment of capital, may all operate as reasonable and strong inducements to such undertakings.

[We omit here detailed accounts of several very extensive and sucessful experim nts, recently accomplished in reclaiming wet and flooded lands by draining; in which tracts of from 10,000 to 50,0 0 acres each, of fertile lands have been added to the productive lands of the country. In some of these cases the expenses of the work was very heavy, but the value of the lands is so great, that, on the whole it is found a very profitable investment of capital, and numerous companies are now engaged in other magnificient improvements of this kind, in different parts of England, Ireland and Scotland.]

GRANDEUR AND VALUE OF THESE IMPROVEMENTS.—I have had peculiar pleasure in giving my readers an account of these magnificent improvements. They present most striking and beautiful examples of the application of capital, labor, and skill, in the actual creation of wealth, and of wealth itself of a reduplicative character, and full of beneficent and enduring results. Thousands and millions, the produce of severe toil, are often wasted upon useless baubles, upon idle pageants, upon objects of mere luxury and parade; and, when the sun goes down, the show passes away as a mere dream. I say nothing of the moral results of such exhibitions, which are but too often not indifferent merely, but pernicious. But here we witness the glorious and enduring triumphs of art and science; the useful application of labor; the means of human subsistance and comfort largely extended; the waste places enriched, the barren made fruitful; the solitude peopled; a wi e territory peacefully rescued from the sea, and converted into the abodes of industry and plenty; and desolate sands and sunken bogs transformed into cultivated fields, waving with golden harvests.

RELATION OF THESE IMPROVEMENTS TO THE UNITED STATES.—It may be thought that such improvements as these can hardly be looked for in the United States for centuries to come, and while so many millions of public and unappropriated lands, of the richest description, remain to be had at the ceapest rates. I am not of this opinion. The value of lands is materially affected by their situation. Excepting in extraordinary fluctuations or seasons of inflated speculation, prices have always a tendency to equalize themselves, and to become conformed to actual values. If land in the immediate neighborhood of a city is worth three hundred dollars per acre, while land in one of the Western States may be purchased at the government price of one dollar and a quarter per acre, it is because the advantages growing out of the position of the one or the other differ in a corresponding degree. In the neighborhood of some of our large and growing cities,—of New York, and it may be said, too, of Boston, for example,—there are extensive tracts of land, (in some cases constantly saturated with water, and rendered comparatively worthless; in others visited regularly by the tide, and producing an inferior herbage, that might be exchanged for what would be far more valuable,) which might be embanked and drained, and reduced to cultivation, for an expens, which under such circumstances, their enhanced and constantly increasing value would much more than repay. Such examples as I have described, if they have no direct application to the United States, cannot be without a most salutary influence in stimulating inquiry and effort; in inducing reflecting and inquisitive minds, and men of bold enterprise, to look about them, and discover, if possible, what means are within their reach of remedying evils under which thev labor, of honestly improving their own condition, and with that, of course, the welfare of the community.

English husbandry, on account of a diversity of climate and soil, and because, likewise, of many circumstances in our social condition, may not be well adapted to the United States; and to follow out its rules, without a just discrimination, would be quite sure to end in disappointment and loss; but, in the perfection to which the art is carried, in the application of the most enlightened and scientific inquiry to its improvement, in the strong and indefatigable interest taken by persons of the highest influence in its advancement, and in the actual gains and various improvements which it has already accomplished, it reads a most important lesson, to the farmers of the United States, to remit no exertion, and to apply all their energies to the advancement of an art involving the most wholesome and an unceptionable application of labor, and constituting the great source of subsistence and comfort, and the basis of national wealth.

(*Modes of draining in our next.*)

Inquiries---Subsoil Plowing and Draining.

MR. BATEHAM: I have some fifty acres of bottom land adjoining a range of hills facing the east and northeast. The geological position of our rocks, dipping to the north and east, renders these bottoms too wet for culture in the spring, and in wet seasons. The surface soil is a loam, somewhat mixed with clay, and portions of it have a substratum of clay. Will subsoil plowing be sufficient to drain land thus situated? Will such lands by subsoiling become earlier fit for work in the spring, and dry sooner after rain? A subsoil plow has never been introduced into this part of Virginia, so far as I know, but it is my intention to make the experiment the coming season, on some portions of the ground mentioned above; and I should like to have your views upon that as well as upon the effects of subsoil plowing generally and as to the character of lands it best suits.

E. WALKER.

Charleston, Kanawah Co., Va., Dec. 1846.

REMARKS.—We cannot speak from personal observation, of the effects of subsoil plowing on lands described above; but reasoning from what we know of the subject generally, we are inclined to think Mr. Walker will find it necessary to cut a drain along the edge of his land adjoining the hill, so as to carry off the water that descends from the hills or rocks above. This done, we doubt not much good would result from the use of the subsoil plow, both in rendering the land more fertile and less liable to suffer from the effects of excessive rains. The increased depth of mellow soil would give the water from rains a chance to settle so as to allow the surface to dry sooner than before; and moisture would also arise and afford a supply to growing crops more constantly during times of drought. We shall say more about subsoil plowing, in connection with draining, after a short time.

Mr. Walker will find subsoil plows for sale at the seed store of Messrs. Ely & Campbell, Cincinnati. We advise purchasers to choose the large size, in preference to the smaller. The price of them we believe, is about $12—small size $9 or $10.

Inquiry--Lime and Ashes.

Mr. Bateham.—I wish to apply lime to my fields designed for wheat next fall; and as it is rather a novel experiment for this region, I should be pleased to have the "modus operandi" explained through the Cultivator. As winter is the only leisure time with us, please state, 1st. what would be the effect of applying lime at this season; 2d. its effect if mixed with roting straw in winter, and applied in spring to summer fallows; 3d, whether the lime will deteriorate in quality if burned in winter and put up in sheds till summer.

I wish also to enquire whether leached ashes that have been exposed to the weather for years, are worth hauling two miles for applying to land.

J. B. W., *Harrison Co. O.*

Remarks.—We should be gratified if D. L. or some other competent correspondent would answer the above inquiries respecting lime.

In regard to the leached ashes, their utility depends mainly on the character of the soil. If somewhat sandy, and exhausted by long cultivation, there is no doubt in our mind but that ashes of the kind mentioned will pay well for hauling that distance. But if the land is heavy, or has not been long in cultivation, we should have doubts on the subject.—Ed.

Use of Lime on Wheat injured by the Fly.

Mr. Bateham: Permit me to ask two or three questions, and solicit answers through the columns of the Cultivator.

I sowed a few acres of wheat last year, which looked well in the fall and early in the spring; but I soon found that the fly was very thick in it, and in hopes to remedy this evil, I pastured with sheep till nothing remained above ground. Most of the plants sprang up rapidly; some spots, however, grew yellow—or rather, did not grow at all; I then got a few bushels of lime and sowed upon the poorest spots, and in about a week I found that the color had changed from yellow to a dark green; and at harvest the yield was at least twice as great where lime was sown as where none was applied.

I also sowed 20 or 30 bushels of charcoal, but could perceive no difference in the wheat arising therefrom.

Now I wish to enquire whether the lime acted as manure only, in producing the result noticed, or whether its effects should in part be attributed to the distruction of the fly. If lime will destroy the fly, it is important for farmers to know it, as that insect is doing great injury to the wheat crop in this region the present fall—some fields being almost wholly destroyed.

I wish also to enquire whether leached ashes will produce the same results on wheat lands as lime, only in less degree.

Some people contend that lime only stimulates the soil or assists the crops to assimilate the elements of nutrition already in the soil, thereby making heavy drafts upon the fund already on hand, so that the soil will become exhausted in a short time, and fall as much below, as it had been stimulated above its natural capabilities—like the effects of ardent spirits on man. If this is really so, I do not see that it is any use to apply lime as a manure for land. Will you, Mr. Editor, give us light on this subject?

A Young Farmer.

Sharon, Medina Co. O., Dec. 1846.

Remarks.—We do not suppose that the lime, in the case above mentioned, was of material service in destroying the fly. If applied liberally in its caustic state, it might destroy such insects as it came in actual contact with; but this would be comparatively few, and besides, it would in this case prove highly injurious to the living plants. We think, therefore, that the beneficial results were attributable to the effects of the lime as a manure, or a "stimulant."

The particular manner in which lime operates upon soils and promotes the growth of crops, we believe has not yet been fully discovered by the most laborious agricultural chemists. It is, shown, however, by observation and practice, that the presence of lime in some of its forms is necessary to the fertility of wheat soils, and a good deal of important light has been thrown by science on the reason for this necessity. We have not room at present to go into an elucidation of this subject, but will do so before long. Suffice it for the present to say, that although lime, as well as plaster, and various other mineral substances, are classed by some agricultural writers, under the head of "stimulating manures;" they are not stimulating in the sense which our correspondent and many others suppose. In other words, there is no danger of their producing injurious results, when applied in moderate quantities, on lands that are deficient in the elements of which they consist. This we will fully explain hereafter, by giving some extracts from writers of the highest authority on these subjects.

Ashes differ in some respects from lime in their effects and mode of operation upon crops and soil. The ash of trees or plants consists of various elements, as silex, potash, &c., which enter into the structure of the plants or crop to be produced, and hence may be considered as necessary *food* as well as a stimulant. It is only, however, where these elements are naturally deficient in the soil, or have become exhausted, that ashes will be found very beneficial—as is the case with lime. If it be ask-whether ashes will answer as a substitute for lime where the latter is deficient, we should say, only in part if at all—the degree of benefit, as before stated, being dependent on the question whether other elements than lime were wanting, and the character of the soil, as it regards sand or clay, &c.

See various articles on the value and use of ashes, in our volume of the past year.

Construction of Chimneys.

The principle upon which the draught is regulated in chimneys, is, that the specific gravity of warm air and smoke, is less than that of cold air. The air which is used in combustion is rarefied, and being lighter than cold air, the cold air rushes in below and drives it upward. Hence, if a chimney is so constructed that this warm air and smoke, has room to get out of the way of the cold air which is driving it upward, no smoke will be driven out into the room in which a fire place is built.

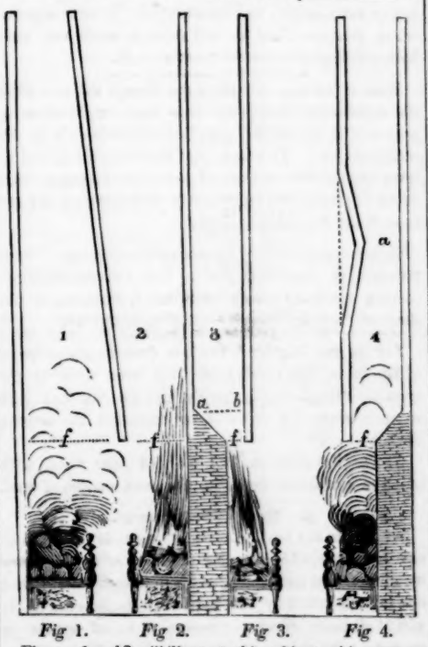


Fig 1. *Fig* 2. *Fig* 3. *Fig* 4.

Figures 1 and 2 will illustrate this subject: chimneys are frequently built in log houses upon the plan of figure 1. The fire being built upon the hearth, it has abundance of room to enter the chimney at the flue F,—but the hole at the top being small, compared with the flue F., there is not room for the warm air and smoke to get out of the way of the cold air, and it will be continually puffing out into the room

On the other hand, if the plan be reversed as in figure 2, and the chimney increases in size upward, from the flue to the top, the draught will be excessive, and the largest portion of the heat will go up into the chimney as in an air furnace.

A medium between these two plans, at fig 3, will create a regular and not excessive draught.

In fig 3, the flue is (as it should be,) the smallest place in the chimney—In ascending from the flue upwards, in the course of about one foot the chimney should widen, or rather deepen off to about two and a half times the width of the flue. If we suppose the flue to be 4 inches, in ascending one foot, the distance from the inside of the front at *b*, to inside of the back at *a*, should be 10 inches—and then if we suppose the width of the fire place to be three feet, the calibre of the chimney on the inside at *a. b.*, will be 360 square inches—And the calibre should not be less at any point above, than at *a. b.* There will then be room for all the smoke which enters the flue to pass upwards without impediment.

The chimney may be brought into a different shape, so as to make it appear well at the top—but still the number of square inches in the calibre should not be lessened. Thus in the case of the chimney, supposed to be 360 square inches at *a. b.*, in fig 3, it may be 16 inches by 24 in the inside at top, or 384 square inches—a not unusual size of chimney tops.

On the other hand, if there be any projections or curvatures which impede the smoke in its passage upward, as in fig 4 at *a.*, such circumstances will have a tendency to prevent the proper draught of smoke, especially in bad weather.

H. J. CANFIELD.

Canfield, Ohio.

Another Answer about Chimneys.—(*Abridged.*) 1st. The throat of the chimney [as at *f* fig 3 and 4,] should be narrow—say from three to five inches wide.

2d. The back of the fire place should be brought forward nearly into a line with the inside of the front of the chimney; and be built perpendicularly, or inclining forward a little, till it reaches the throat of the flue.

3d. After being carried up to within a proper distance of the mantletree to afford the requisite width of throat, the back should recede almost at a right angle, to the back line of the chimney, which should leave the flue four times as wide as the throat.

4th. The flue or chimney should be carried up perpendicularly, and have the same size throughout.

Note.—A chimney built according to these rules, may sometimes have too much draft; but that can be easily regulated by putting a damper of sheet iron inside of the throat.

Seth M. Root.

Pittsfield, Lorain Co. O.

Restoring Fertility to Exhausted Wheat Lands---use of Marl in Ohio, &c.

(Letter from Guernsey County.)

Mr. Bateham: I have derived both pleasure and instruction from the perusal of your valuable paper for the past year; and as you invite farmers to contribute for its pages such facts and observations as may appear to them of interest, I will endeavor to comply with that invitation, by stating some facts and asking a few questions in relation to the lands of this neighborhood, and especially the farm on which I reside.

This farm is situated in Cambridge township, (Guernsey county,) four miles north of Cambridge, on Wills creek, and contains 160 acres of land, most of it cleared. This land was originally covered with a heavy growth of beech, hickory, and black ash, and a slight sprinkling of red oak and sugar maple, excepting some strips of ground lying a foot or two lower than the rest, which are too wet for the plow but good for grass, and were originally covered with swamp white oak and pin oak. The whole of this land is underlaid with a stiff clay subsoil, impassable to water; so that water sometimes remains in the furrows for two or three weeks after a rainy spell; with the exception of one field of about ten acres, lying in a bend of the creek; on this field the forest consisted of white and black walnut, white hickory, wild cherry and elm.

Three years ago I had this field in clover, pastured with hogs and cattle one year, then plowed in September and sowed it with wheat. At harvest I cut upwards of five hundred dozen of sheaves from eight acres; but the grain was poor and shriveled. The next spring I planted the ground with corn, and harvested a middling crop; in September sowed wheat among the corn and plowed it in, and the last harvest cut a very heavy crop of straw, but the grain was poor and shriveled, and would not make wholesome bread. It made us sick to eat it, and even the hogs would scarcely eat it.

Now, what is the cause of this defect or disease in the wheat? Cannot you, Mr. Editor, or some of your able correspondents, throw light on this subject? This field has been in cultivation thirty eight years, and in former years brought good crops of wheat; but it evidently will not yield good wheat any more until something is done with the land to restore those ingredients, (whatever they are,) that have been exhausted, and are necessary for the production of good wheat. From experiments and observation, I am convinced that if all the animal and vegetable manure that can be produced on the farm, were hauled on to this field, it would not make it produce good wheat. The same may also be said of most of the other parts of the farm; (and of many other farms in this region;) the soil has become exhausted of a certain element which it formerly contained. and this must be restored or the culture of wheat will have to be abandoned.

The application of lime or plaster is almost out of the question, owing to the expense, although I have no doubt these substances would be of great benefit. Then the question arises, what can be best done with the materials that we have at command? There is on this farm, a bed of *marl*, eight or ten feet in thickness, which can be dug out and spread on the land; and Wills creek annually deposits thousands of loads of decayed leaves, mud and sand, which can easily be used as manure; then there is a salt well on the premises, which affords sufficient salt water for the manufacture of three hundred bushels of salt per week. The well is 400 feet deep, and the water rises of its own accord 8 or 10 feet above the surface of the ground, 100 gallons of water will yield 1 bushel of salt.

Now, considering the marl, creek mud, salt water,

and barn-yard manure, the great question with me is, how shall I go to work, and which or how many of these materials shall I employ to restore fertility to my wheat fields—supposing that it can be done with the materials named?

I enclose you a small specimen of this marl, and request that you will examine it, and give your opinion of its character and value; and also the best mode of applying it.

If you can put this rough letter in a shape that it can be read and understood, perhaps some of the correspondents of the Cultivator will be induced to give us the results of their experiments in restoring fertility to similar lands; and thus confer a great benefit on a large number of readers.

Sincerely your friend,

DAVID SARCHET.

Near Cambridge, Dec. '46.

REMARKS ON THE FOREGOING.—The renovation of exhausted wheat lands, is a subject of much importance in connection with agricultural improvements in Ohio; and we are gratified to find that a large number of sensible farmers, like friend Sarchet, are *compelled by necessity* to see and acknowledge the importance of combining more SCIENCE with their practice of farming. Happy will it be for those who make this discovery in time to reform their system of culture before their lands become so exhausted as to afford no return for the expense and labor bestowed; and fortunate would it be for the prosperity of our State, if her legislators would see this subject in its true light, and take measures at once to obtain and diffuse such information on this and kindred subjects as would save her millions of acres of good wheat lands from reaching the condition of those described by Mr. Sarchet!

The specimen of *marl* sent us by Mr. S., is of the kind called *clay marl*—that is, composed of clay and carbonate of lime. It effervesces freely with acid, giving evidence of being tolerably rich in lime. We could not ascertain the proportion of lime without a larger specimen, and more time to make the experiment. The application of this marl, either alone or in conjunction with the creek deposits, we have no doubt would prove highly beneficial to the land described by Mr. S. Its effects, however, would be more observable a year or two after its application (and exporure to frost and air,) than at first, and greater on sandy or gravelly land than on clay. The quantity advisable to be applied must depend mainly on the ability of the owner to afford the necessary labor. There is little danger of applying too much, especially if evenly distributed, and exposed to the action of the air and frost before plowed in, or used for a growing crop. Perhaps 10 to 20 two-horse wagon loads, per acre would be as much as could be afforded to a whole field at once; but by way of experiment, a larger quantity might be applied to an acre or two. The good effects of marling may be expected to last from seven to ten years, with a rational system of cropping.

This kind of marl must not be confounded with the marl of New Jersey, Delaware and Maryland, or what is sometimes called Green-sand; for that is a very different substance. Instead of simply carbonate of lime and clay or sand, the marl of the Atlantic States usually comprises a liberal per centage of potash, and sulphate of lime, and often several compounds of iron, copper and other minerals. It is these marls that are referred to in the letter of Dr. Locke, published in our last volume, p. 155.

We doubt not that valuabled beds of marl may be found in many parts of Ohio, and it is our design to publish in a short time, full information in regard to the value and mode of using this substance; as well as other means of restoring fertility to wheat soils.—ED.

Oregon Wheat.

MR. BATEHAM: I send you a small sample of wheat raised last year in Oregon territory. I took it from a garner of at least 3000 bushels in Dr. McLaughlin's mill. The product of such wheat is from 25 to 40 bushels per acre. I have sown a small quantity at this place, and will endeavor next year to inform you of the result.

HIRAM SMITH.

Findley, O., Dec. 1846.

REMARKS.—The sample of wheat sent us with the foregoing, is of remarkable fine appearance; the kernels being very large, plump, and of light color. It is evidently different from the kinds raised in this country; but whether it is a distinct variety, or only changed by the effects of soil and climate we cannot say:—ED.

OHIO CULTIVATOR.

COLUMBUS, OHIO, DECEMBER 1, 1846.

"Happy New Year."

THANKS and a thousand compliments to you all, kind friends and patrons, who have so promptly sent us *cards of invitation* for a renewal of our semi-monthly visits to your homes and firesides! It is true, we miss at present the names of many old friends from our books, but we hope ere long to have the pleasure of renewing our visits to them: and, besides, we find already a goodly number of *new* ones added to our list. To them, and to *all*, we say, give us a cordial welcome; regard with lenity our failings; and encourage us by your approval when you can; and we will strive to make our visits both pleasing and instructive to you all.

HOW IT LOOKS.—We think our friends will admit that the appearance of our sheet is as much improved as we promised it should be; and, (modesty aside,) is in fact nearly *perfect!* This new type is just the thing, and allows considerable increase of matter in our pages; then friend TAYLOR, our young artist, is making up for lost time in the way of ENGRAVINGS.

Correspondents must excuse us for omitting a large number of inquiries, and a few communications; (among the latter is one from Hon. J. Mathews of Coshocton) they shall receive attention in our next

FLY IN THE WHEAT. We hear from nearly all parts of the State, that much injury has been done to the growing Wheat crop by the *fly*; and we fear that with an open winter the evil will be increased the coming Spring.

The weather since our last has been quite mild, with much rain within a few days past, and oceans of *mud*.

A Real Compliment.

We tender our best acknowledgements to the *Steubenville Hocticultural Society*, for electing us an honorary member of that body, and for the high compliment paid our humble labors by the notice of the Secretary. It will at all times afford us pleasure to be of service in promoting the objects of this, and all similar societies, when it is in our power to do so.

More still!—Since writing the above, the Secretary has sent us *ten dollars* by order of the Steubenville Hort. Soc. for our paper for the coming year, for members of the Society. That speaks well.

New Year's Present--Insects.

We have received from MR. WILLIAM JENISON, of Dayton, a collection of *coleopterous* insects, (beetles,) embracing one hundred and sixty genera, indigineous to this country, all numbered, and the names given in a catalogue. This is a present of very great value in our estimation, and must have cost the donor a large amount of time and labor in its preparation.

MR. JENISON is a naturalist of a high order of attainments, and deserves to be more extensively known than he now is. We understand that before his removal to this country, he occupied a high rank in several of the scientific societies of Europe; and was a contributor to a number of their journals, as well as a collector of specimens in natural history. He is still ardently devoted to these pursuits, and would willingly make himself useful to science in this country if oppertunity was offered. We earnestly wish that he could be employed in making researches in entomology; cannot the Cleveland Society of Natural History engage his services.

Those District Agricultural Fairs

The resolutions of the State Board, for holding meetings in different sections of the State, and inviting the farmers and others to get up exhibitions in connection with these meetings, we have no doubt was adopted with a belief that good results would follow; and such will no doubt be the case, if the friends of progress and improvement will come forward and do their duty; and especially if the Legislature infuse living energy into the Board by granting means for defraying its expenses. Without this we have little faith that much can be done in the way proposed. And if the small appropriation asked from the State is obtained, we are inclined to believe that more general good would be accomplished by having one State exhibition at Columbus or some other central location than by attempting a large numbert.

We doubt not that a pretty good exhibition could be gotten up in the way proposed, in one or two of the districts named; especially if made to take the place of one or more of the county exhibitions, as we think should be done; but we do not believe that more than one or two of the districts will attempt to carry the arrangement into effect. We may be mistaken in this, however, and if so, shall rejoice to learn it whenever the friends of the plan will send us evidence of the fact.

Our great reason for not attempting a number of such Fairs, is the circumstance, that one or two of the fall months is the only convenient season for attending to such matters; and it would require more time and labor than the members of the Board would generally be willing to bestow, to attend these meeting so immediately after each other, and take that part in the duties of the exhibitions which would be expected of them.

We should be gratified if our correspondents and those interested would give us their views on this subject during the winter. There will doubtless be a meeting of the Board in the spring, and the matter can then be reconsidered if thought advisable.

Sheep and Dogs, again.

Several of our sheep farming correspondents, have inquired of us, whether there is any probability that the legislature will do any thing this winter to protect their flocks from the ravages of worthless dogs. They say the work of slaughter has again commenced, and in some place the evil is so common that wool growing will have to be abandoned unless a remedy is soon provided.

After all the efforts that were made last winter, and the thousands who sent in their petitions in vain for this object, we confess we have very little faith in any means that can be used to induce action on this important subject. Nor do we wonder at the feeling of despondency and even bitterness it has occasioned among a large number of good farmers in the State. The following extract from a private letter, recently received from M. BEACH, Esqr., an enterprising gentleman and sheep farmer of Warren county, is a fair specimen of a number that have come to our hand:

"Will the legislature do any thing this winter in regard to taxing (or killing) dogs? They have resumed their work of destruction among the sheep of this region, having killed whole flocks. They attacked my flock early this fall, and killed and wounded several, among the rest a very fine Guadeloup Marino ram which I bought of Mr. Sawyier. They bit him shockingly, so that he died in 30 days. He was the finest Merino ram I ever saw, and as large as my Bakewell and Cotswold of the same age. I live so near to town where there are not less than 3 0 dogs kept, some families keeping 3 or 4, and the poorer the men the more the dogs, that I must abandon the business of sheep raising. I have now 300 fine ewes, and will sell them for less than the wool and lambs will be worth in the spring, if you can find me a purchaser. The society of shakers asked me the other day to bring out a petition to their village, for them to sign, asking for a tax on dogs; but I replied, I believe it of no use, after all that was done in that way last year. I have no confidence in our legislature in this respect at all; they taxed our sheep last winter, and let the worthless dogs go—what an absurdity!"

Such are the feelings that extensively prevail; and hence we presume that few if any petitions on this subject will be sent in the present winter; at the same time

we think it is the bounded duty of the friends of agriculture in the present General Assembly, to regard the petitions of last winter as addressed to them, and to pass a law for the purposes desired. If it is thought that a *tax* would be too obnoxious to the feelings of the majority, let some measures be devised for checking the rambling propensities of these murderous curs, and for reducing their numbers by administering to them lead pills when off their owners promises.

LADIES' DEPARTMENT.

New Year's Address.

To the Patrons of the Ohio Cultivator.

JANUARY 1, 1847.

BY MISS. H. E. G. OF CLEVELAND, O.

'Tis OVER! we've laid him to rest in his glory,
We've pillowed his form in the vaults of the tomb;
His journey is done, and recorded his story,
Unmurmering he bowed to the trumpet of doom,
For his step was infirm, and his head grown hoary,
And the light of his spirit was shrowded in gloom.

Some sighs may have risen, some tear drops have started,
From the hearts of the few, as he lay on his bier;
But the knell that proclaimed FORTY-SIX had departed,
Was drowned in the welcome that hailed the NEW YEAR;
And his mourners are lost in the throngs of light-hearted
That crowd o'er his grave with rejoicing and cheer.

Yet mild was his reign, and the blessings he bore us,
The gifts that so freely behind us we cast,
Have haply been richer than time will restore us,
And those who rejoice may lament him at last;
For the future that's stretching in dimness before us
May treasure no gems like the vaults of the past.

And who will not sorrow that with him have perished,
The gay blooming pageant he led in his train;
The fair that he fondled, the pure that he cherished,
All withered, and silent beside him are lain;
And hopes that he kindled, and flowers that he nourished
Will gleam never more, will not blossom again.

For gone is the life from the green turf up-springing,
And bare are the trees that were bending with fruit;
And the bright feathered birds through the skies that were winging
Have left the cold realms, where all gladness is mute,
And the heart vainly yearns for the songs they are singing
In the far southern lands of the flower and the lute;

But ah, when earth's beauties around us have faded,
When spring time and summer's bright moments are told,
When the Storm-king is out with his ice jewels laded,
The fountains to choke, and the streams to enfold,
When winter's gray pinions, our pathway have shaded,
And kindly hearts shrink from his whisperings cold;

To YOU, noble Patrons, we turn for a blessing,
On you are our hopes placed of comfort and cheer;
From Ceres' gay smiles, and from Flora's caressing,
O'er laden with life's righest gifts, ye appear;—
Then blest, ever blest be our Farmers, possessing
The key to the treasures, and stores of the YEAR.

Ye came at his call when the early grass started,
Ye wrought at his side through the summer time warm,
Ye culled from his hoards when the mellow fruit parted,
From boughs it had clung to through sunshine and storm;
Ye've trod hand in hand, with the year that's departed,
Till closed the dark grave o'er his mouldering form.

Though veiled be the future most boldly ye scan it,
And shake from its gray robes the fruits of our clime,
And life, though a few fleeting moments must span it,
Ye lighten with labor unsullied by crime;
For the furrows ye turn on our round rolling planet,
Have guarded your brows from the plow-share of time.

Ye've watched the soft showers from the heavens descending,
Ye've garnered the sunshine, and treasured the dew.
Ye've gathered the wealth of the yellow corn, bending,
On hill side and lea, 'ere the pleasant hours flew;
And now while our thanks to the skies are ascending,
To whom shall we turn for life's gifts but to you?

The tillers of earth are the treasurers of heaven;
Ye hoard up the benisons sent from above;
And the feasts that we spread as we greet Forty Seven,
To welcome our friends and our gladness to prove—
Ye bring from the gifts by the vanished year given;
His tokens of kindness, his missives of love.

'Tis thus, ever thus that forgetfulness flingeth,
Its veil o'er the pleasures, and joys that are fled,
Some new gleaming vision before us up-springeth,
And forth o'er the flowers of the present we tread;
Or wait for the bliss that the coming hour bringeth,
Unheeding the gifts, by the parted ones shed.

Though gone are the beauty and sunshine of summer,
Still bright are the hearths of our yeomanry bold,
And young men, and maidens have hailed the new-comer,
Who hath for a twelve-month his banner unrolled;
He'll turn them a prize if he's not a misnomer,
For SEVENS were the Jubilees always of old.

If now he looks dark; never fear for his frowning,
He watched the old year die, but soon 'twill be seen;
All thought of his sire in oblivion drowning,
And driving the coldness and clouds from his mein,
He'll doff the gray wig he has donned for his crowning,
And frolic and smile like a maid of sixteen.

He comes like a monarch, but still I am thinking,
He comes heavy laden with blessings concealed;
His lip has a curl, and his eye has a winking,
As if they held secrets too weighty to wield,
And his white mantle swings in the wind with a clinking,
That hath to the watchful a treasure revealed.

No doubt old Saint Nicholas, recently shaking,
With laughter and fun from the holidays gay,
Grew tired of the back-load of gifts he was taking,
For want of receivers, unwilling away,
And felt quite relieved at the New Year's awaking,
On his youthful shoulders the burden to lay.

He sits on a throne, but the sceptre he swayeth,
Will fall with bright shadows on forest and glade,
To him 'round whose spirit hope's hallowed light playeth,
Whose trust in his God, and his right arm is stayed,
A confidence this that time never betrayeth,
A joy that's unchanging in sunshine and shade.

The birds, and the flowers have flown from their places
The skies have grown dark, and the autumn leaves sere.
But still merry Maids! keep the bloom on your faces,
And songs on your lips, while the winter looks drear;
A warm happy smile is the home of the Graces;
To such we are singing our "Happy New Year."

Keep the hearth ever bright, and the fire ever burning,
Bring the wanderer cheer—for the weary make room;
Give joy to the bosom for sympathy yearning,
And bind up the spirit that's pining in gloom;
And who will not mourn when the spring tide returning
Hath called them from life's brightest summer of home.

For the darkness that's round us, ye've many a treasure;
Then scatter them freely from basket and store,
For the heart-gifts that ye now may strew without measure,
The autumn of life will, with increase restore;
Till your hearts shall exclaim, overflowing with pleasure,
"O God thou hast blest me, I ask for no more."

The joys of the past from oblivion we borrow,
From the future perchance we have prizes to win,
But tho' dark be his brow, never shrink, for to-morrow,
From sunshine without, or from trials within,
Your draught will be mingled of gladness and sorrow,
As still from the dawning of life it has been.

These moments, devoted to general greeting,
Observe then, with gladness unshadowed by fear;
May the tales that they tell be of joyous hearts beating,
Of bright beaming smiles, and the rarest of cheer,
And the kindest of welcomes, and tho' they are fleeting,
We hail them, the first of a "happy new year."

To Destroy Red Ants.

MR. BATEHAM: As every housekeeper may not know how to get rid of these troublesome little intruders, I will state my experience.—Place a piece of fat bacon, or a small pan of grease or butter near the place where they enter the kitche nor pantry. This will soon attract them together, when they can be easily removed, or destroyed by a little hot water. Thousands may be destroyed in this way in a few days. ABBY.

Clarkson, O., Dec. 1846

Receipt for Curing Hams.

Take an ounce of saltpetre for each ham and one pint of molasses to every pound of saltpetre.

Then take a quarter of a pound of common salt to every pint of molasses used.

Heat the mixture till it nearly boils, and smear the *meat* side with it, keeping the mixture hot and rubbing it in well, especially around the bones and recesses.

Let the hams lie after this from four to seven days, according to the size of the hams.

Then place them in a salt pickle, strong enough to bear an egg, for three weeks. Then soak eight hours in fresh water.

Then hang in the kitchen, or other more convenient place, to dry for a fortnight. Then smoke from three to five days, or till well smoked.

Then wrap them up in strong tar paper, tying it close. Then tie them tight in bags of coarse unbleached cotton, stuffing in shavings, so that no part of the paper touches the cotton. Hang them near the roof in a garret, and they will never give you any trouble.—*Miss Beecher's Receipt Book.*

DIRECTIONS FOR SALTING DOWN PORK.—Cover the bottom of the barrel with salt an inch deep. Put down one layer of Pork and cover that with salt, half an inch thick. Continue thus till the barrel is full. Then pour in as much strong pickle as the barrel will receive. Always see that the Pork does not rise above the brine. When a white scum, or bloody-looking matter rises to the top, scald the brine and add more salt.

Leave out bloody and lean pieces for sausages.

The Pork ought to be packed as tight as possible, and *always* kept *under* the brine. Some use a stone for this purpose. In salting down a new supply, take the old brine, boil it down and remove all the scum, and then use it to pour over the Pork.—*Ib.*

TO TRY OUT LARD.—Take what is called *the leaves* and take off all the skin, cut it into pieces an inch square, put into a clean pot over a slow fire, and try it till the scraps look a redish brown, taking great care not to let it burn, which would spoil the whole. Then strain it through a strong cloth, into a stone pot, and set it away for use.

Take the fat to which the smaller intestines are attached (not the large ones), and the flabby pieces of pork not fit for salting, try these in the same way, and set the fat thus obtained where it will freeze, and by spring the strong taste will be gone, and then it can be used for frying.—*Ib.*

Straw Cutting Machines.

We are often asked which is the best kind of Straw Cutters; but since the number has become so great, it is not a very easy question to answer. Much would of course depend on the amount and kind of work the machine is wanted to perform. Thus one kind may be best adapted to the farmer of limited means, who has only a small amount of fodder to cut; and another for extensive feeding where horse power may be applied.—Again, the same machine that is best for cutting hay or straw may not be the best for corn stalks. We will notice two forms that are now much approved in New York and elsewhere:

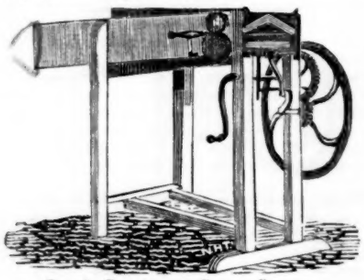
HOVEY'S STRAW CUTTER.

This we believe is decidedly the best of the cylindrical form of cutters. It is an improvement on Green's patent, which was extensively sold about ten years ago. The knives of Hovey's machine are set on the cylinder in a winding or spiral form, which greatly facilitates the operation. Mr. C. N. Bement, who is an excellent judge of such matters, in a late number of the Albany Journal, says:

"Among the numerous and various machines which have fallen under my notice, and they have not been few in number, I have found Hovey's spiral straw cutter preferable, on some accounts to any other which I have had in use. First, for dispatch and ease of operation. Second, for duribility, simplicity of construction, and superior workmanship. Third, for the manuer in which the knives are fastened and regulated on to the cylinder. They are fastened by screws to the wings cast on the cylinder, which serves greatly to support and strengthen the knives, and by means of *set* screws the knives can be set out or in, as they wear away, or as they become unequal in width. Each knife can be taken off seperately from the cylinder, ground and replaced and set by screws so as to come in contact with the hyde roller, on which they cut, which cannot be done on any other machine which I have seen. As

proof of its durability, or liability of its being put out of order, I would observe that I have had one in use, summer and winter, for four years past, cutting for four horses, and have had, as yet no occasion to grind the knives, nor has it cost me one cent for repairs during that time."

This machine is the invention of William Hovey, Worchester, Mass. It is for sale at the agricultural warehouses in New York and New England. Price $10 to $20, according to size, &c.



RICH'S STRAW AND STALK CUTTER.

This machine operates on an entirely different principle from the one above described. Instead of a number of knives cutting like *chissels* against a cylindrical block, this has *one* knife, (bent at an abtuse angle on the edge,) cutting past a fixed plate of steel, like *shears*. A small crank on the shaft to which the power is applied, gives the knife a perpendicular, or guillotine motion. It is more simple and less expensive in its construction than Hovey's, and we think much better adapted for those who wish to cut *corn stalks* as well as hay and straw; as we have noticed that in cutting corn stalks with the cylindric machines, pieces of stalks will sometimes wedge in between the knives so as to prevent their operating, especially if the stalks are at all damp. It should be observed that Rich's machine will not cut hay or straw near as fast as the other, although it is a very efficient and valuable implement for those who have not a very large number of animals to cut for. The machine has received the highest honors at agricultural Fairs, and large numbers have been sold of late, especially in Western New York.

The inventor is Joseph C. Rich, of Penfield, Monroe Co., N. Y. They are for sale by Rapalje & Briggs, Rochester, and others; price $10.

☞In answer to an inquiry, we would state that the Hand Corn Shellers, described in our paper of Dec. 1st, are not for sale in this State, to our knowledge. They can be obtained by addressing the editor of the Genesee Farmer, Rochester; the Cultivator, Albany; the American Agriculturist, New York; or R. L. Allen, Esq. New Orleans.

Cure of Murrain in Cattle.

MR. BATEHAM:—The bloody murrain is a disease that so frequently prevails, with fatal results, among cattle in this part of Ohio, that I have thought proper to detail a course of successful treatment, practised recently on a favorite ox. I will premise that the characteristics of murrain in this case, were as clearly developed as any I ever saw in my experience of thirty-eight years in this region of country, where this destructive malady has always been a severe scourge to dealers in cattle.

On the morning of the 5th of Dec., inst., one of my oxen was lying down, and when my son went to feed the cattle, he reported to me that he thought the ox was not well. I immediately went to him and found him disinclined to get up or walk, and he would not eat, and driving him about I soon heard him grunt; his nose was dry, with twitching in his neck and flanks. We immediately procured one pound of glauber salts, dissolved and mixed with about a half gill of spirits turpentine, and drenched him with it; we then put him into a field adjoining and in sight of where we were at work, and occasionally I went myself to examine and drive him about the field, but he evidently grew worse through the day. About sun down we drove the ox into the yard, and (as his physic had not operated) gave him another pound of salts with turpentine in the morning. The blood by this time flowed freely in his urine, and he was so feeble that we all thought he would die before morning; so we drove him off near half a mile to save the trouble of hauling off his carcass. On the next morning, to our astonishment, the ox appeared better; his physic was operating and he appeared free from pain, and would eat a little. We drove him to the yard again, and at 10 o'clock drenched with half pound of alum to stop the blood. His appetite increased, but the blood continued to flow, until 12 o'clock the following day, (the 7th) when we drenched with a strong decoction of soot, in which was dessolved a half pint of table salt; we then gave no more medicine, but kept the ox in the yard where we could see him at any time. On the 8th the ox appeared to have a good appetite; his bowels were regular, the blood had stopped flowing, he chewed his cud and looked bright about the eyes. On the 9th, the ox appeared perfectly free from disease and was turned out with the other cattle.

D. GREGORY.

Berkshire, Del., Co. O., Dec. 15, 1847.

Care of Sheep in Winter.

Necessity of Protection—There is nothing, says the author of the American Shepherd, appertaining to sheep economy, more generally neglected than the provision of ample and warm accommodations for shelter, and from no other cause does such large losses accrue. It is rigidly practised in Prussia, Germany, Scotland and the northern parts of England; and every sheep historian recommends it. So indispensable is it held, that the author of a Scotch work upon the subject, lays down this emphatic rule:—"Shelter is the first thing to be attended to in the (winter) management of sheep"—a rule, whose common sense must commend it to the adoption of every sheep owner. While every good shepherd is decidedly hostile to their being confined or to their being forced into shelter, whether they wish it or not, it cannot be too strongly recommended to all sheep farmers, to put the means of avoiding the severity of stormy weather within the reach of their flocks at all times. To illustrate the *advantage of shelter*, our author adduces the example of Mr. Spooner's experience, which we will give in his own words.—He says:

"Until within the last ten years, the writer's flocks, like thousands of others at the present time in this and other states, were denied the benefits of shelters; and the loss, in proportion to the severity of winters, varied from 5 to 10 per cent. The diseases caused by their exposure were such as *scab, pelt rot, dysentary*, and *colds*, which caused an excessive discharge of *mucus* from the nostrils, while many died from no other cause, apparently, than sheer poverty of condition. Since, however, his sheep have been protected, the deaths have not exceeded *one and a half per cent.* in regard to *number*, and if comparative value were the standard, it would not be considered of any moment, as the loss has been mostly among diminitive spring lambs—so from bad nursing, and old ewes which, from superiority of fleece or carcase, were retained thus long, to breed from."

Protection materially *increases the weight of the fleece and improves its quality.* The comforts of shelter enables the animal the better to retain its flesh, as also, to receive accessions, and as a consequence, to increase its fleece, as the secretions which produce flesh and the fluids which impart growth to the wool all proceed from the same source. But as facts are more reliable than theory, we will state that the flock of the writer increased in weight of fleece, *by shelter*, from 2 lbs. 5 oz. to 2 lbs. 9 oz. to 3 lbs. 2 oz., making an aggregate difference in the weight of the wool of his flock of 200 pounds. The wool, too is greatly improved in softness, as also in the soundness and evenness of the fibre, properties which tend much to enhance its value in the market.

The superior condition of the ewes, induced by the comforts of shelter, *materially increases the number of the lambs.*

Shelter saves provender, as animals consume less food when kept in comfortable quarters than when exposed to the inclemency of the weather; under the latter circumstances a large portion of their food, by the law of necessity existent in animal economy, being appropriated to purposes of heat, which under the former condition would have gone to the production of flesh, muscle, and fat.

Feeding.—Hay is the standard of sheep-feeding, and it is presumed that sheep which receive daily, per head, 3 lbs. of first quality hay, or its equivalent in that and other food, can be subsisted in a healthful wool and milk producing state. The large, long-wooled sheep require more food than the small, fine-wooled ones. While the *former* would require from 3 to 3½ lbs. of hay or its equivalent in other food, the *latter* may be subsisted upon 2 to 2½ lbs. of hay or its equivalent, per head; the rule being that 2¼ lbs. of hay is required to support, daily, every 100 lbs. live weight. The feed of sheep may be varied as follows, and they be benefited by the change of diet, as—

Hay, 3 lbs. per day, for a week.

Hay 1 3-4 lbs. 1 lb Potatoes per day, another week, or

Hay 1 lb. 2 lbs. Potatoes per day, for the third week.

These several daily allowances to be divided into three parts and fed out, say, in the morning, at day dreak, at noon and in the evening, just before sunset. If other vegetables should be substituted for potatoes, as cabbage, turnips, or Swedish turnips, the same weight will answer. If the common white turnips be, it will require double the weight. If beets be substituted, one-third more in weight must be given.

If *straw* be substituted for *hay*, it will require thrice the quantity. and should be chopped and moistened with water, and mixed in with the vegetables.

There are various other articles of food named in the tables, but as they are not grown in this country we have omitted naming them. *Oats* and *Barley* straw are preferred to those of wheat and rye.

The *stalk of Indian corn*, cut fine, is very nutricious food for sheep—so are also corn-cobs ground fine and moistened.

Beans ground into meal, and mixed with chopt hay or straw, in the following proportions make an excellent wool-producing provender. One-half lb. Bean meal, 2 lbs. Hay—or ½ lb. Bean meal and 3 lbs. straw.

Buckwheat straw, when carefully cured, is recommended for sheep—so also is *millet hay.*

If *Barley* or *Oats*, be fed to sheep, a half pint of either grain may substituted for 1 lb. of hay—but each of these grains should be chopt and moistened and mixed with cut hay or straw as the case may be.

What food will produce the most wool?—Peas and *beans*, corresponding more with the elements of fat than the various grains, are better adapted to the production of wool, than either wheat, corn, rye, barley, oats or buckwheat. These latter, together with the Ruta Baga turnip being peculiarly adapted to the production of fat should be used mostly for the feed of sheep when undergoing the process of fattening.

Over-feeding should not be resorted to, as it deteriorates the quality of the wool the best, finest and softest wool is always produced when the sheep is kept in a healthy condition, fed regularly at stated hours, but not in excess.

The *quality of hay* is an object. If *coarse*, much of it will be rejected by sheep, say to the extent of from 10 to 25 per cent.; so, therefore, to obviate the necessity of making allowances for such, care should be taken to provide hay of a *fine* quality. *Twenty tons* of hay would carry 100 head of sheep through the winter in excellent health and condition.

Importance of Green Food.—The feeding of green food, such as *potatoes, apples, turnips, &c.* are deemed essential to the health of the sheep. Confinement wholly to dry food does not comport with that variety of condiment, which has so frequently been urged; and consequently is followed by the disorganization of the digestive functions, producing *costiveness* and the disease called the *stretches. Pine bows* should once a week be given them. Besides preventing the occurrance of *costiveness* and the *stretches*, green food tends to increase the wool and yolk secretions, and to impart elasticity, soundness and softness to the fleece; maintains the sheep in health, improves his condition, and augments the quantity of wool.

Water necessary.—To enable the sheep to provide himself with *saliva* to assist him in the process of rumination he should be daily allowed water to drink.

Management of Lambs.—At the beginning of this month, the lambs should receive a portion of meal of some kind, daily, say, in the proportion of a peck to 100 head; about the middle of the month this quantity may be increased to ½ a bushel. To induce them to eat potatoes, the meal should be sprinkled over them. Half a bushel of potatoes given twice a week will be about the right quantity, which must in addition to the meal receive a sprinkling of salt. These messes must be understood to be in addition to their allowance of hay.

Management of two year olds.—Sheep of this age require as much food as the matured ones, and should receive similar attention.

Management of Breeding Ewes.—The course of management will depend on the time of yeaning. At least a month before this period is to arrive, they should receive liberal allowances, daily, of potatoes, for the assimilation of milk; to the potatoes a little wheaten shorts mixed with a little barley, or oat meal should be added.

Mode of Foddering.—All hay and long fodder should be fed from racks.

Salting.—Sheep should have salt given them at least thrice a week. Indeed, if they had daily access to it in a trough under cover, it would be better. And where pine bows are not to be had conveniently, a mixture of tar and salt should be placed in a trough.—*Am. Far.*

Prairie Navigation.

THE WIND-WAGON—We learn from the Independence Expositor, that Mr. Thomas, who has been at work on a wind-wagon, has got the machine completed, and has given it such a trial as to make its success certain. He ran up and down across the plains, found he could overcome a steep with gentle ascent without difficulty, and that the mole-hills, so numerous on the plains, were no bar to his progress. The construction of the wagon is very simple. It is a frame made of plank, well braced and placed edgewise on four axle-trees—four wheels to each side—these wheels to be 12 feet or more in diameter and one foot broad—the forward axles, which can be turned just as the forward axle of any wagon with a tongue, by their movement turns the course of the whole concern—two tongues are joined together forward of the wagon and by ropes coming to the wheel similar to the pilot wheel of a steamboat—the wagon is steered by a pilot. The sails are like to the sails and rigging of a ship, each wagon carried its own supply of sail—underneath, a foot or so from the deck of each wagon, the cast iron boxes, &c., will be suspended as ballast. Mr. Thomas expects to convey freight and passengers, and will now engage and bind himself to take freight to Bent's Fort or to Santa Fe, in a reasonable time at at $6 per hundred pounds. He is to have a depot at Bent's Fort, and thence across the other side of the Arkansas he will run another car within sixty miles

of Santa Fe. A gentleman who rode on his wagon says that, with only one sail and a light breeze, it went at the rate of eight miles an hour. Properly rigged, its speed will be about an twenty miles hour.—*St. Louis Repub.*

Hard words--Science and Nonsense.

One of the greatest hindrances in the way of diffusing a taste for scientific reading among farmers and other working men, is, the obscure and incomprehensible language in which some writers on science have seen fit to clothe their ideas. We admit that in treating of the sciences it is often necessary to use *terms* or *names* that to the unpractised reader are not familiar, and at first may appear forbidding; but this is not the evil of which we complain. It is that ridiculus affectation of *great learning*, which induces men of shallow minds to interlard their sentences with the greatest possible number of words derived from foreign languages, and such as few if any readers can pronounce or understand without the aid of a cart load of dictionaries.

We cannot better illustrate our meaning, nor more surely call forth indignation against this species of literary pretenders, than by subjoining a specimen of this style of writing which we find in a late number of the New York Farmer and Mechanic, In which paper it appears under the head of Tennessee Correspondence; and the writer appears to be overburthened with the conviction that he is imparting to the world some new and profound discoveries relating to the *tides*, and some other phenomena of nature! We think the editor ought, in mercy to his readers, to have appended a column or two of definitions.

Now boys, hunt up all the dictionaries and encyclopedias you can find, and invite in the school master, then read and explain (!) the following paragraphs; It will be a good winter evening's exercise, especially for *farmers* and *mechanics*, for whose benefit it was of course designed.

"But aside from solar interference, the greatest tide is yielded when the moon acts with the greatest obliquity through the equatorial plane or longest diameter of the earth.

'Wherefore it may be inferred that the opponent tendencies of gravitation and repellence originate tides during inchoate efforts at equations, between home conservative and foreign disturbing forces.

'The earth and moon each emanate a conic column of relations concentrating upon their *joint pivot of motion*, but at the same time, the particles of both orbs preserve stronger action convergent on their own respective *true centres*.

'The movement of water is an equipoising attempt to provide against the accruing differences between the home and foreign influences upon the same matter, and hence an altitude of 40 feet tide, near the Arctic Circle, when the moon's declination is 28 degrees from the plane of the equator, would be resolved into a tide of 20 feet, where the moon's *action coincident* with that plane.

'In every case of tides, it happens that the sides of the earth and the moon next each other grant an ascendency to the foreign attractions over the reciprocal repellent action, but on the exterior sides, the attractions are counteracted because the mutual repellences have no opposition from the exterior direction to their action.

'This elevation of tides equally in opposite directions is therefore no paradox, else we could not find the magnetic attractions and repellent attributes coetaneously resident in the same mariner's needle; yet, in the one case the results are very diminutive and in the other very magnificent.

'It is certain that all those classes of properties termed calorific, luminous, gravitating or elastic, or any designated as electro-magnetic-effluence, are actual subjects of intangible law, and do ever become vivified instruments for manifesting moral capacities.

'By living organization, spiritousity obtains developement and seizing upon simple instinctive perceptions tests the soundness of verities and by careful collocations reaches remote deductions in rationalism.

'The inferior animals enjoy many instinctive capacities for knowing in common with the human race, but man only posesses an *interior self* capable of employing simple instinctive conceptions for abstruse reasoning."

A Portable Grist-Mill.—We have seen Fitzgerald's Patent Grist-mill in operation, and saw it make the best of flour from quite ordinary wheat at the rate of about six bushels to the hour, when propelled by a single horse power. With steam and water power it is said to be capable of grinding twelve bushels per hour. It is of very simple construction, about the size of a meal bin, is light and portable, and is calculated to make every farmer his own miller. It will grind corn, coffee, pepper and the like with very little waste and by hand power. To a neighborhood of farmers at distance from a mill, this machine would save one thousand dollars a year. It will be exhibited at the different county seats in Northern Ohio the coming winter.—*Cleveland Plain Dealer.*

For the Ohio Cultivator.

The Farmer's Weather-ometer.

Comprising General Indications and Local Predictions respecting the Changes of Weather, gathered during Travels in America and Europe.

BY A RURALIST.

When the flower of the *Chickweed* expands boldly and and fully, no rain will happen for four hours or upwards. If it continues in that open state, no rain will disturb the summer's day. When it half conceals its flower the day is generally showery—but if it entirely shuts up, or veils its white flower with its green mantle, a settled rain will ensue.

If the flowers of the *Siberian Sow Thistle* remain open all night, rain will certainly fall next day.

The different species of *Trefoil* always contract their leaves at the approach of a storm. So certainly does this take place that these plants have been called "The Farmer's Barometer."

If the *African Marygold* opens not its flowers in the morning about seven o'clock, you may be sure it will rain that day, unless it thunders.

The *Convovulus* and *Pimpernel* fold up their leaves on the approach of rain.

An unusual quantity of seed on *White Thorn* and *Dog Rose Bushes* mark a wet summer, and their unusual fruitfulness is a sign of a severe winter.

When *Onions* have thin skins it is an infalible sign that a mild winter will follow—when thick a cold one—nature thus providing, prophetically, for their preservation until spring.

Lord Bacon says—"If the oak bear much mast, it prognosticates a long and hard winter." The same has been observed of hops and haws. If broom be full of flowers, it usually signifies plenty.

The fluids and fibres of the animal body are easily affected by changes of the surrounding atmosphere.—In the healthy may be found vivacity, buoyant spirits, and agility, when the air is pure and elastic—but a light and damp air throws the body into a state of languor and debility. Animals, whose bodies are not injured by human follies, perceive sooner, and are more susceptible of the impressions produced in them by variations of the atmosphere, and sooner exhibit signs of them.

A gentleman of South Carolina had a pointer dog which was a remarkable prognosticator of bad weather. He had this dog with him on a voyage, and in describing the trip, thus speaks of him—"Whenever I observed my pointer prick up his ears in a listening posture, scratch the deck, rear himself up to look over to the windward; and eagerly snuff up the wind, though it was the finest weather at the time, I was sure of a succeeding tempest—and the captain became so convinced of his prophetic skill, that he permitted him to regulate the movements of the vessel."

If bees keep near the hive, it announces rain. If they return to their hives before the usual time, it may be concluded that the rain will fall soon. On the contrary if they fly far from their hives, and return home late, they foretel very fair and hot weather.

When Bats remain longer than usual abroad from their holes, fly about in greater numbers, and to a greater distance than common, it announces that the following day will be warm and serene—but if they enter their houses, and send forth loud and repeated cries, it indicates bad weather.

If the Owl screams during bad weather, it announces that it will soon become fine. The croaking of Crows indicates fine weather. Joseph Taylor, of England, says —"When the Raven croaks three or four times extending his wings and shaking the leaves, it is a sign of serene weather."

When Ducks and Geese fly frequently backward and forward, plunge often into the water, are noisy, flying about, it is an indication of rain.

If Pigeons return slowly to the pigeon-house, it indicates that the succeeding day will be rainy.

When sparrows chirp a good deal, and make a noise to each other to assemble, it is a sign of rain or wind.

When Fowls roll more than usual in the sand—if poultry go to roost in the day time—if unusually tame, fowls grub in the dust, and clap their wings,—and small birds seem to duck and wash in the sand—if cocks crow late and early, or at uncommon hours, clapping their wings—if the red-breast be seen near houses—rain is not far distant.

Lancaster, O.

Great Corn Crops.

The Committee on Agricultural products of the Geauga co. Agricultural Society, award to Lester Taylor, of Claridon a premium of two dollars on the best acre of corn. Yield one hundred and forty-two and a half bushels of shelled corn.

To Gideon King of Middlefield on second best acre of corn one dollar. Yield one hundred and fourteen bushels shelled corn.

White Clay and Marl.

An old farmer of Muskingum county inquires of us whether the white clay that abounds in the hills of portions of that county, would prove useful as a manure. He says it resembles potter's clay, but there is not enough sand in it for the potters.

We are of the opinion that little benefit will result from the application of this clay to land, unless the land be of too sandy a nature, in which case the clay will improve its texture and productiveness, but will hardly pay for the expense of hauling. This we say in the belief that the clay does not contain *lime*. If, however, this is a mistake, and a good portion of lime is comprised in the clay, making it properly a *marl*, very great benefit may be derived from its application to wheat land, as we have remarked in another part of this paper.

The question can easily be decided by the following test: Take a small quantity, say a table spoonful of the clay, dried and crushed to a powder; carry it to a drug store and put it into a glass vessel or cup, then pour in sufficient *muritic acid* to cover the powder. If it contains lime it will instantly effervesce violently; and if not no disturbance will follow. Strong vinegar will answer for this experiment, but not quite so well. To ascertain the per centage of lime in marl or earth, requires nice weighing apparatus and some little chemical skill.

Peach Orchards in Ohio.

It will be gratifying information to all, to know that the culture of the Peach is to be extensively enlarged for this market. A gentleman from Philadelphia, heretofore connected with one of the extensive Peach Orchards that supply that market, has just purchased a farm of about 100 acres on the little Miami Rail Road, near Milford which is all to be cultivated with this delicious fruit. He has 10,000 budded trees now on the way from New Jersey, which will form his first planting next spring.—He will adopt the mode of culture now so successfully followed in New Jersey and Delaware, and turn his whole attention to securing and perfecting the best kinds of Peaches. The establishment with which he has been connected, sold 25,000 bushels last year in Philadelphia, Baltimore and New York markets, at prices ranging from 12½ cts to $1,50 per basket of about 3 pecks — the price averaging about 12½ cts a peck. The business gave employment to a large number of hands through the summer, and required for several weeks a steamboat and two sloops to carry the fruit to market.

Our friends Messrs Longworth, Hill, and others, who have gone so extensively into the Peach culture, have nothing to fear from the increase of supply; for when good peaches are sold at a moderate price, it may be truly said of them, as of the love of Hamlet's mother for her husband, "increase of appetite will grow by what it feeds on."—*Cin. Gaz.*

Royal Flour and a Royal Price.—Last fall Mr. Henry Smith, an enterprising miller of Le Roy, in this county, sent six barrels of the superfine Genesee flour manufactured at his mill in Wheatland, Monroe county, to Queen Victoria, and for which in due time, he received from her Majesty the comfortable little sum of *three thousand dollars!* The flour was put up in highly finished barrels, and neatly varnished, enclosed in sacks, and forwarded direct to the Queen at London.

This fortunate experiment upon the appetie of royality seems to have suited her Majesty's palate so nicely that in addition to the ample remuneration for his first adventure he has recently received an order direct from London for *three thousand barrels* "of the same sort," which he has promptly forwarded.—*Batavia (N. Y.) Times.*

On Purchasing Wood

Wood that is straight and solid makes more in a load, and is the most profitable.

A cord of small crooked sticks does not contain half the wood there is in a load of solid logs

The best wood for fires is the hickory, hard maple, white ash, black birch, yellow birch, beech, yellow oak, and locust. The best are placed first.

The following are inferior in quality. Elm., soft maple, white birch, pepperage and pine.

The following are not fit to burn, either because they snap or will not burn. Chesnut, butternut, cedar, sassafras, red oak, and buckeye.

Any person can learn to distinguish each kind by a little attention and instruction.

Wood is bought by measurement. A cord of wood is 8 feet long, 4 feet wide, and 4 feet high.

To know the amount of a load, multiply the length by the breadth, and the product by the height, and you have the number of square feet. If it is 128 feet, it is a cord.

Buy your wood when it is cheap and plenty.

Best Remedy for Burns.—Pound and sift *wood soot*, and mix it with sweet lard, and apply it, spread on linen rags. It will ease a burn quicker than anything. If the skin is off, the great thing is to keep it covered close from the air. If the burns are large and band, give salts or cream tartar as a cathartic.—*Ex.*

Farmers' Club in Belmont County.

Barnesville, Belmont Co. 12mo. 12th, 184?.

FRIEND BATEHAM:—I take pleasure in communicating the intelligence to the readers of the Cultivator in this vicinity, that a Farmers' club has been formed in this Township. At an adjourned meeting held for the occasion, on the evening of the 26th ult., a constitution was adopted for the government of an agricultural association, to be styled the Warren Township Farmers' Club—eligible to admit to membership any citizen of Warren or any of the adjoining Townships.

A sufficient number of members having enrolled themselves, the club proceeded to elect officers, and the following were chosen:

JOEL DONDUA,	for	President.
THOS. SHOTWELL,	"	Vice President.
JOSEPH CREW,	"	Treasurer.
ANDREW BLOWERS,	"	Rec. Secretary.
JONATHAN T, SCHOLFIELD,	"	Cor. Secretary.

We this evening held our second meeting and prospects look fair and promising.

Respectfully,

JONA. T. SCHOLFIELD, Cor. Sec., W. T. F. C.

Guernsey County.

By a letter from the President, we learn that an Agricultural Society for Guernsey county, was organized at Cambridge, on the 6th ult. MR. GASTON was elected President; T. W. PEACOCK, Vice President; and C. J. ALBRIGHT, Secretary.

Notice of Harrison Co. Ag. Society in our next.

"Our own OHIO, and the tillers of her soil."

PROSPECTUS OF THE

Ohio Cultivator----Vol. 3----1847.

Devoted to the promotion of Agriculture, Horticulture, and Domestic Industry.

Published at Columbus, Ohio, on the 1st and 15th of each month, by M. B. BATEHAM, Editor and Proprietor, assisted by a very large number of practical and scientific contributors—farmers, horticulturists, &c., and *Illustrated with numerous* ENGRAVINGS.

TERMS *One Dollar* per year, for single subscriptions; or four copies when ordered together, for *three* dollars; all payments made in advance; all subscriptions to begin with the volume, and none received for less than a year. Letters with subscriptions may be sent by mail at the risk and expense of the editor.

The Cultivator has now become so well known to the farmers and friends of agriculture in Ohio, that nothing need be said of its character or design. Its pages will continue to diffuse intelligence of the utmost practical importance to farmers, and all who are concerned in the cultivation of the *soil* and the *mind*. It will contain the latest and most reliable intelligence respecting the crops and the *markets*, both in this country and in Europe, so as to aid the farmer in deciding at what time and price to dispose of his productions. This information alone will be worth, to most farmers, many times the price of subscription, especially now that the prices are so much affected by foreign intelligence.

The influence of the paper, wherever it has been generally read, is admitted to have been highly salutary. It has begun to awaken a spirit of inquiry and improvement among the farmers, and to inspire them with more just and elevated conceptions of the character, duties and pleasures of their noble occupation. As evidence of this, it may be stated, that during the past year, Agricultural Societies have been organized in twenty counties of this State; and there is reason to believe that as many more will be formed during the year to come. These associations, in connection with the State Board of Agriculture, and the CULTIVATOR as an organ for the diffusion of intelligence, cannot fail to exert such an influence on the *minds* and the *practice* of the farming community, as will in a few years place our GIANT STATE in that position which she is by Nature designed to occupy—the first State of the Union in agricultural wealth and lasting prosperity.

***At a meeting of the Ohio State Board of Agriculture, Oct. 28, 1846, the following resolution was offered by Col. John Johnston, of Miama, and unanimously adopted: '*Resolved*, That the extended circulation of the OHIO CULTIVATOR is highly conducive to the agricultural interests of the State: and this Board do hereby earnestly commend the same to the patronage of the farmers and friends of Agriculture in Ohio.'

☞Editors with whom we exchange, will confer a favor by giving the above an insertion in their papers, or by noticing the commencement of our new volume, with the terms, &c.—ED.

ENGLISH NEWS, MARKETS, &c.

The news by the Cambria, to Dec. 4, is not of much importance to farmers, though on the whole it is favorfor the trade in American produce. Flour was firm at a slight advance on previous quotations—prime western in bond sold at 30 @ 31s. per bbl. Wheat and Indian corn had also improved in prices; the latter for export to Ireland.

The suffering among the poor in Ireland had been considerably relieved; not less than 150,000 Irish laborers were employed on the public works.

It is the general belief that the ports will not be opened for the free admission of foreign bread-stuffs and provisions.

In American provisions the trade was dull. Beef and Pork were in but slight demand, and previous high prices scarcely maintained. Butter, cheese, lard and tallow had declined a trifle.

WOOL.—The periodical sale of wool had just closed, and was largely attended, with sales of about 20,000 bales of Colonial and Foreign, at prices that were considered highly satisfactory. United States wool attracted some attention, but much complaint (as usual) was made of the irregular manner of sorting and packing, and imperfect washing.

The Markets.

CINCINNATI, Dec. 29.—The *Hog* trade has been quite active during the past two weeks, with higher prices than was generally anticipated. Sales continued to be made at $3 @ 3,10 to 3,25 (forextra heavy,) ₱ 100 lbs. Green hams from the block sell at 4½ @ 4¾ cts ₱ lb; sides and shoulders 3½ cts. Lard No 1, 6 @ 6½ cts. ₱ lb. Lard Oil 62½ cts ₱ gall. Flour advanced a trifle last week, but has now declined again—sells at $3,60 @ 3,65 to 3,70 ₱ bbl. Wheat is worth 62½ cts; corn and oats 22 @ 24 cts; barley and rye 45 @ 50 cts. Butter, for packers brings 8½ @ 9 cts; and rolls for retail, 10 @ 12½ cts; best do, in market 14 @ 16 cts. Cheese is in less demand than formerly—sells at 6¼ @ 6½ cts.

AT COLUMBUS the slaughter of hogs is still going on, and a fair demand exists for these animals whether dead or living—the latter state is preferred. Price according to quality, from 2,25 @ 2,50 ₱ 100 lbs.

PHILADELPHIA CATTLE MARKET, DEC. 26.—The offerings of beef cattle this day were about 800 head, 200 of which were driven to N. York, and the balance all sold at $5 @ 6,50 per 100 lbs, is an improvement upon the ruling rates of last week. 350 cows and calves sold at from $15 to 30 for free; $12 to 20 for springers, and $7 to 12 for dry. 300 hogs were offered and sold at $4,50 @ 5 ₱ 100 lbs. 1100 sheep sold at from $1 to 3 as in quality, and some extra at $350.

NEW YORK, DEC. 26.—Genesee and Ohio flour $5,56½ @5,62 ₱ bbl. Wheat $1,10 @ 1,16 ₱ bu. Corn is in good demand—new southern and Jersey at 75 cts; old 80 @ 82 cts ₱ bu. No change in pork or other provisions.

COLUMBUS PRODUCE MARKET.

Corrected for the Ohio Cultivator, Dec. 30.

GRAIN.				Honey, strained	12½	@	14
Wheat, ₱ bu.,	53	@	55	POULTRY.			
Indian corn,	18	@		Turkeys, each,	37	@	50
Oats,	14	@	15	Geese, "	18	@	25
PROVISIONS.				Ducks, "	10	@	12½
Flour, retail, bbl, 3,62	@	3,75		Chickens, "	8	@	10
" 100 lbs 2,00	@			SUNDRIES.			
" Buckwheat, 2,00	@			Apples, bu.	37½	@	50
Indian meal, bu. 25	@			" dried,	37	@	50
Hominy, quart, 3	@			Peaches, dried,	1,37	@	1,50
Beef, hd qr.	@			Potatoes,	20	@	25
" 100 lbs., 2,50	@			" Sweet,	75	@	1,00
" fore qr., 2,00	@			White beans ₱ bu	75	@	1,00
Pork, mess, bbl. 8,00	@			Hay, ton,	3,00	@	4,00
Hogs, ₱ 100 lbs, 2,25	@	2,50		Wood, hard c,rd	1,75	@	2,00
Hams, country lb, 5	@	6		Salt, bbl.,	1,87	@	2,00
" city cured, 7	@			SEEDS.			
Lard, lb., rct., 5½	@	6½		Clover, bu.,	3,00	@	3,25
" in kegs or bls. 6	@			Timothy,	1,00	@	1,50
Butter, best rolls, 10	@	12½		Flax,	75	@	
" common, 8	@	9		ASHES			
" in kegs, 7	@			Pot, 100 lbs,	2,75	@	3,00
Cheese, 6½	@			Pearl,	3,00	@	3,50
Eggs, dozen, 12	@	15		Wool, common,	18	@	20
Maple sugar, lb.	@			" ha'f bl'd,	20	@	23
" molasses, gal.	@			" full bl'd.		@	
Honey comb, lb, 10	@	12½					

☞SHORT ADVERTISEMENTS, suited to the agricultural character of this paper, will be inserted at the rate of six cents per line, for the first and three cents for each subsequent insertion.

N. H. TAYLOR, having returned to Columbus, is prepared to attend to orders in the line of his profession. Room over Pinney and Lampson's store, 3d story. Refers to the Editor of the Cultivator. *Jan. 1st., 1847.*

Dutch Bulbs, Flower roots, &c.

A full assortment of Bulbs and other Flower roots, imported this season, direct from Harlem (Holland,) consisting in part of double and single Hyacinths in great variety, and of all colors; double single and parrot Tulips, Polyanthus Narcissus in variety; double single and sweet scented Jonquils, Crown Imperials in variety, yellow, blue, white, gold and silver Crocus, Amaryllis, Iris, Ranunculus, Anemones and Gladiolus in variety; scarlet, martagon, Lillies, double and single Snow drops, Tuberoses, Tigridas, &c. &c.—For sale at the Seed Store east fifth street, near the Dennison House, Cincinnati. H. HUXLEY.

Also, a choice assortment of Flower and Vegetable Seeds: Canary and other singing Birds; Bird Cages and Bird seeds—Garden Tools in great variety.

Fruit Trees, Grape Vines, Shrubs and Green House plants, supplied to order. *Dec 1.*

"Columbus Female Seminary."

MR. AND MRS. SCHENCK'S SCHOOL.

THE undersigned deem it due alike to the interests of Education, and to Mr. and Mrs. Schenck, to call public attention to this important and excellent institution. *Here* where it is known it is properly appreciated. It is to those at a distance who have young ladies to educate, that it is especially commended. The school is now firmly and prosperously established, all the branches of a finished female Education are thoroughly taught. It is believed to be equal to the highest educational wants of any community. There is no seminary in the Union, known to the undersigned where in their judgment a young lady can receive a superior education.

The Government of the School is mild and parental, but at the same time firm and effectual. The Principals have recently taken a large building adjoining the one formerly occupied by them, and are now prepared to accommodate a considerable number of additional boarders. The friends of those sent as boarders, may rest assured that they will be treated with the utmost kindness—and that every attention will be paid, as well to their moral and social as their mental culture.

The experience of those who have been boarders heretofore, warrants the undersigned in saying in respect of those who may come hereafter, that it will be for reasons personal to themselves, if they are not contented and happy, and do not make a very rapid progress in all that is desirable in the education of a young lady.

The moderate rates of the charges, compared with those of other schools of less merit—will commend this institution still farther.

Trustees.

. F. PERRY,	P. SISSON,
JOHN NOBE,	JOEL BUTTES,
N H SWAYNE,	J. R. SWAN,
O. FORTT.	DANS STEWART,

Columbus, O., Nov. 28th, 1846.

GRAND RIVER INSTITUTE.

THIS Institution is situated at Austinburg, Ashtabula county O. It is strictly a Manual Labor School, liberally endowed by benevolent individuals with the specific end in view of connecting regular exercise, daily, with thorough intellectual and moral training.

THE COURSE OF STUDY is adapted to two departments.

An English Department embracing a four years' course, where instruction is given not only in the common English branches, but in the higher departments of a thorough English Education, and

A Classical Department where a course of four years' study preparatory to an advanced standing in any of the Colleges at the East or West, may be pursued, with unusual facilities, it is believed, of careful instruction, commodious rooms, accommodated for two occupants, &c.

EXPENSES.—*Tuition* at the rate of $15 a year, for all studies alike. Room-rent $5, a year. Incidentals $3, a year. Board $1, a week.

There are two terms in a year. One commencing the last Wednesday in ugust; The other on the first of March, each of about twenty weeks. There is a department for young Ladies with similar facilities, without charge for rooms.

Young Ladies can at present, receive instructions in music on the Piano, with use of an instrument, for the usual additional charge. Certificates of good moral character and the age of fourteen, conditions of admission to any of the Departments.

MADISON COLLEGE.

Located in Antrim, Guernsey County Ohio.

Has now been in successful operation for five years. Rev. Samue Mehaffer is President and Professor of Mathematical, Natural, and Moral Sciences; and Jas. Duncan, M. Professor of the Latin and Greek Languages; and Rev. S. Findley, Senr., Professor of the Hebrew Language.

he above College is most delightfully situated in a very healthy region; the society good; Boarding low and good, (not more than one dollar per week.) There are in the village, four churches. The Associate Reformed, the Baptist, the Presbyterian, and the Methodist; and other denominations frequently have preaching in the place. It is entirely a rural seat of literature, and special attention is paid to the Science of Agriculture, which is properly a branch of natural science.

DAVID JOHNSON,
Secretary of Board of Trustees.

Lake Erie Nursery, Cleveland, Ohio,

ELLIOTT & CO., Proprietors.

THE proprietors of this Nursery offer for sale one of the largest stocks of Fruit and Ornamental Trees, Shrubs, Roses, &c., &c. ever offered in Ohio.

Orders through the Post Office or otherwise, will receive prompt attention, and when desired, trees will be packed in such order that they may be conveyed many hundred miles without injury.

Cleveland, May 1, 1846.

Portage Mutual Fire Insurance Company,

Cuyahoga Falls, Ohio.